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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,473

02/07/2006

Astrid Hauser

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201 7590 09/17/2008  
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EXAMINER

BADR, HAMID R

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

09/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/567,473	<b>Applicant(s)</b> HAUSER ET AL.	
	<b>Examiner</b> HAMID R. BADR	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/07/2006</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drake et al. (2000, Soy protein fortification affects sensory, chemical and microbiological properties of dairy yogurts; hereinafter R1) in view of Zhang et al. (1997, Effect of soy protein hydrolysate (SPH) on proliferation of lactic acid bacteria; hereinafter R2) and JP 59082050 (Abstract, hereinafter R3).

3. R1 discloses making yogurts with milk (10% solids) containing 1-5% (w/w) soy protein (Page 1244, materials and methods). Given that milk contains about 3% protein, the yogurt will contain about 3% milk protein.

4. R1 teaches using a yogurt starter culture including *Lactobacillus bulgaricus* and *Streptococcus thermophilus* (page 1245, Col. 1, Microbiology and instrumental measurements).

5. While R1 discloses yogurt product containing milk protein and soy bean protein, R1 is silent regarding the inclusion of soy protein hydrolysate and vegetable oil in the formulation.

6. R2 discloses the incorporation of soy protein hydrolysate (SPH) in fermented milk. R2 reports that the soy protein hydrolysate stimulates the growth of bacteria in the

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fermented. R1 discloses that the hydrolysate can not only serve as a nutrition reinforcer, but also plays an important role in the yogurt manufacturing. (Abstract)

7. R1 and R2 are silent regarding the use of vegetable oil in the formulation.

8. R 3 discloses a pudding which is prepared by lactic acid fermentation of an aqueous emulsion of soybean protein hydrolysate. (Abstract)

9. R3 teaches using the protein hydrolysate at below 10% and more preferably 2-8%.

10. R3 teaches of using vegetable oil or animal fat at 1/4-1 times the dry protein content of the formulation. Assuming a 5% solids from the soy protein and 2% solids from the soy protein hydrolysate and about 3% solids from the milk protein for a total 10% solids, about 2.5-10% oil can be added to the formulation having so much protein.

11. Given that increased fermentation times or lower final titratable acidities have been reported with soy-based yogurt, due to a lack of essential nutrients for the lactic acid bacteria (R1, page 1246, col. 2, first 4 lines) and dairy yogurts fortified with soy protein exhibit higher viscosities than control dairy yogurts (page 1246, col. 2, first paragraph), incorporation of some soy protein hydrolysate to alleviate the viscosity and thickness problems brought about by unhydrolyzed soy protein would be obvious to those of ordinary skill in the art. The limitation of claim 11 of 40% or more hydrolyzed protein, can be experimentally optimized by an artisan in light of the amounts of protein hydrolysate disclosed by R3.

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12. Given that a fermented yogurt product can be prepared containing hydrolyzed and unhydrolyzed soy bean protein, Stevens value (texture indication) and viscosity (thickness) will be intrinsically resulted in the ranges as presently claimed.

13. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to make a yogurt containing soy protein as taught by R1 and replace some of the unhydrolyzed soy protein with soy protein hydrolysate at taught by R2 and R3. One would do so to prepare a value added product made with more available, less expensive proteins such as soy bean protein having other nutritional benefits such as cholesterol lowering effects and provision of isoflavones. Absent any evidence to contrary and based on the combined teachings of the cited references, there would be a reasonable expectation of success in making a yogurt product as presently claimed.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO 03/055324. While this reference is pertinent to the invention, it was not used as a reference because the protein hydrolysate is a complex composition with emulsifiers and the present invention does not use emulsifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-T 5:00 to 3:30 (Friday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr  
Examiner  
Art Unit 1794

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1794